

## **4.7.4 ANALYSIS FOR EARTHQUAKE LOADS**

### **4.7.4.1 General**

All bridges in Seismic Zones 2, 3, and 4 shall be analyzed by the multimode elastic method (MM).

The soil spring constants for piles, drilled shafts, or deep foundations can be modeled using the procedure in the FHWA Manual "Seismic Design of Highway Bridge Foundations" Report No. FHWA/RD-86/101.

Existing structures that require major rehabilitation and are in Seismic Zones 2, 3, and 4 shall be evaluated for seismic retrofit in accordance with the FHWA Manual "Seismic Retrofitting Guidelines for Highway Bridges" Report No. FHWA/RD-83/007.